

SEQUENCE LISTING

<110> Novozymes Biopharma UK Limited
 Sleep, Darrell

 <120> Gene and Polypeptide Sequences

 <130> 11055.204-US

 <140> 10/522,074
 <141> 2005-07-08

 <150> GB 0217033.0
 <151> 2002-07-23

 <150> PCT/GB2003/003273
 <151> 2003-07-23

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 <170> PatentIn version 3.5

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Tyr Ser															

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Phe Ser

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 and mature human albumin CDS

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 caccttgttc ggtgataagt tgtgtactgt tgctaccttg agagaaacct acggtgaaat 360
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 atacttctac gctccagaat tgttgttctt cgctaagaga tacaaggctg ctttcaccga 600
 atgttgtaaa gctgctgata aggtgcttgg tttggtgcca aagttggatg aattgagaga 660
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ccattcgaag	atcacgtcaa	gttgggtcaac	gaagttaccg	aattcgctaa	gacttggtgt	180
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tgtactgttg	ctaccttgag	agaaacctac	ggtgaaatgg	ctgactgttg	tgctaagcaa	300
gaaccagaaa	gaaacgaatg	tttcttgcaa	cacaaggacg	acaacccaaa	cttgccaaga	360
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gaagatcacg	tcaagttggg	caacgaagtt	accgaattcg	ctaagacttg	tgttgctgac	240
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ccaaaggcta	ctaaggaaca	attgaaggct	gtcatggatg	atttcgctgc	tttcgttgaa	1740
aagtgttgta	aggctgatga	taaggaaact	tgtttcgcctg	aagaaggtaa	gaagttggtc	1800
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<212> DNA

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<223> Synthetic oligonucleotide leader sequence and the mature human albumin coding region

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gaaaatttca	aagccttggg	gttgattgcc	tttgctcagt	atcttcagca	gtgtccattt	180
gaagatcatg	taaaattagt	gaatgaagta	actgaatttg	caaaaacatg	tgttgctgat	240
gagtcagctg	aaaattgtga	caaatcactt	catacccttt	ttggagacaa	attatgcaca	300
gttgcaactc	ttcgtgaaac	ctatggtgaa	atggctgact	gctgtgcaaa	acaagaacct	360
gagagaaatg	aatgcttctt	gcaacacaaa	gatgacaacc	caaacctccc	ccgattgggtg	420
agaccagagg	ttgatgtgat	gtgcactgct	tttcatgaca	atgaagagac	atttttgaaa	480
aaatacttat	atgaaattgc	cagaagacat	ccttactttt	atgccccgga	actccttttc	540
tttgctaaaa	ggtataaagc	tgtttttaca	gaatgttgcc	aagctgctga	taaagctgcc	600
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agactcaagt	gtgccagtct	ccaaaaattt	ggagaaagag	ctttcaaagc	atgggcagta	720
gctcgcctga	gccagagatt	tcccaaagct	gagtttgag	aagtttccaa	gttagtgaca	780
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gctgcaagtc	aagctgcctt	aggctta				1827

<210> 23
 <211> 47
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide leader sequence

<400> 23		
ctaaagagaa	aaagaatgga gacgatgaat acccacttca tctttgc	47

<210> 24
 <211> 72
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide leader sequence

<400> 24		
atgaagtggg	tattcatcgt ctccattctt tttctcttta gctcggctta ttccaggagc	60
ttggataaaa	ga	72

<210> 25
 <211> 1827
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide leader sequence and mature human albumin coding region

<400> 25		
atgaagtggg	tattcatcgt ctccattctt tttctcttta gctcggctta ttccaggagc	60
ttggataaaa	gagatgcaca caagagtga gttgctcatc ggttttaaaga tttgggagaa	120
gaaaatttca	aagccttggt gttgattgcc tttgctcagt atcttcagca gtgtccattt	180
gaagatcatg	taaaattagt gaatgaagta actgaatttg caaaaacatg tggtgctgat	240
gagtcagctg	aaaattgtga caaatcactt catacccttt ttggagacaa attatgcaca	300
gttgcaactc	ttcgtgaaac ctatggtgaa atggctgact gctgtgcaaa acaagaacct	360

gagagaaatg	aatgcttctt	gcaacacaaa	gatgacaacc	caaacctccc	ccgattgggtg	420
agaccagagg	ttgatgtgat	gtgcaactgct	tttcatgaca	atgaagagac	atTTTTgaaa	480
aaatacttat	atgaaattgc	cagaagacat	ccttactttt	atgccccgga	actccttttc	540
tttgctaaaa	ggtataaaagc	tgctttttaca	gaatgttgcc	aagctgctga	taaagctgcc	600
tgctgtttgc	caaagctcga	tgaacttcgg	gatgaaggga	aggcttcgtc	tgccaaacag	660
agactcaagt	gtgccagtct	ccaaaaatTT	ggagaaaagag	ctttcaaagc	atgggagcagta	720
gctcgctga	gccagagatt	tcccaaagct	gagtttgag	aagtttccaa	gttagtgaca	780
gatcttacca	aagtccacac	ggaatgctgc	catggagatc	tgcttgaatg	tgctgatgac	840
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gaatgctgtg	aaaaacctct	gttggaaaaa	tcccaactgca	ttgccgaagt	ggaaaatgat	960
gagatgcctg	ctgacttgcc	ttcattagct	gctgattttg	ttgaaagtaa	ggatgtttgc	1020
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cagcttgagg	agtacaaatt	ccagaatgcg	ctattagttc	gttacaccaa	gaaagtaccc	1320
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cccaaggcaa	caaaagagca	actgaaagct	gttatggatg	atttcgcagc	ttttgtagag	1740
aagtgtgca	aggctgacga	taaggagacc	tgctttgccg	aggagggtaa	aaaacttggt	1800
gctgcaagtc	aagctgcctt	aggctta				1827

<210> 26
 <211> 1827
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide plasmid sequence

<400>	26					
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gaaaacttca	aggctttggt	cttgatcgct	ttcgctcaat	acttgcaaca	atgtccattc	180
gaagatcacg	tcaagttggt	caacgaagtt	accgaattcg	ctaagacttg	tgttgctgac	240
gaatctgctg	aaaactgtga	caagtccttg	cacaccttgt	tcggtgataa	gttgtgtact	300
gttgctacct	tgagagaaac	ctacggtgaa	atggctgact	gttgtgctaa	gcaagaacca	360
gaaagaaacg	aatgtttctt	gcaacacaag	gacgacaacc	caaacttgcc	aagattgggt	420
agaccagaag	ttgacgtcat	gtgtactgct	ttccacgaca	acgaagaaac	cttcttgaag	480
aagtacttgt	acgaaattgc	tagaagacac	ccatacttct	acgctccaga	attgttgttc	540
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tgtttggttg	caaagttgga	tgaattgaga	gacgaaggta	aggcttcttc	cgctaagcaa	660
agattgaagt	gtgcttcctt	gcaaaagttc	ggtgaaagag	ctttcaaggc	ttgggctgtc	720
gctagattgt	ctcaaagatt	cccaaaggct	gaattcgctg	aagtttctaa	gttggttact	780
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aagaactacg	ctgaagctaa	ggacgtcttc	ttgggtatgt	tcttgtagca	atacgctaga	1080
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aagtgttgta	aggctgatga	taaggaaact	tgtttcgctg	aagaaggtaa	gaagttgggc	1800
gctgcttccc	aagctgcttt	gggtttg				1827

<210> 27
 <211> 72
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide leader sequence

<400>	27	
atgaagtggg	ttttcatcgt	ctccattttg
ttggataaga	ga	
		60
		72

<210> 28
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide secretion pre-sequence

<400> 28

Met	Lys	Trp	Val	Phe	Ile	Val	Ser	Ile	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5				10					15		
Tyr	Ser														

<210> 29
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic polypeptide leader sequence

<220>
 <221> MISC_FEATURE
 <222> (1)..(1)
 <223> CAN BE EITHER Phe OR Trp OR Tyr

<220>
 <221> MISC_FEATURE
 <222> (2)..(2)
 <223> CAN BE EITHER Ile OR Leu OR Val OR Ala OR Met

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> CAN BE EITHER Leu OR Val OR Ala OR Met

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> CAN BE EITHER Ile OR Val OR Ala OR Met

<400> 29

Xaa Xaa Xaa Thr Xaa
1 5

<210> 30
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic polypeptide secretion pre-sequence

<400> 30

Leu Phe Leu Phe Ser Ser Ala Tyr Ser Arg Gly Val Phe Arg Arg
1 5 10 15

<210> 31
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic polypeptide secretion pre-sequence

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> any amino acid PREFERABLY Phe

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> any amino acid PREFERABLY Ile

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> any amino acid PREFERABLY Val

<220>
<221> MISC_FEATURE
<222> (8)..(8)

<223> any amino acid PREFERABLY Ser OR Thr

<220>

<221> MISC_FEATURE

<222> (9)..(9)

<223> any amino acid PREFERABLY Ile

<400> 31

Met	Lys	Trp	Val	Xaa	Xaa	Xaa	Xaa	Xaa	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg								
			20												

<210> 32

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polypeptide secretion pre-pro sequence

<400> 32

Met	Lys	Trp	Val	Phe	Ile	Val	Ser	Ile	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg								
			20												

<210> 33

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polypeptide secretion pre-sequence

<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> CAN BE EITHER Lys OR Arg OR His

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> CAN BE EITHER Phe OR Trp OR Tyr

<220>

<221> MISC_FEATURE

<222> (4)..(4)

<223> CAN BE EITHER Ile OR Leu OR Val OR Ala OR Met

<400> 33

Met Xaa Xaa Xaa

1

<210> 34
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide leader sequence

<400> 34
ttcatcgtct ccatt 15

<210> 35
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide primer

<400> 35
gcatgcggcc gcccgtaatg cggatcgtg aaagcg 36

<210> 36
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide primer

<400> 36
gcataagctt acccacttca tctttgcttg tttag 35

<210> 37
<211> 11
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide linker

<400> 37
ttaggcttat a 11

<210> 38
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide linker

<400> 38
ccgaatattc ga 12

<210> 39
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide primer

<400> 39
gttagaatta ggtaagctt gtttttttat tggcgatgaa 40

<210> 40
<211> 1865
<212> DNA
<213> Artificial Sequence

<220>
<223> s. cerevisiae 5'UTR and synthetic oligonucleotide leader sequence
and mature human albumin CDS

<400> 40

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cgctcacaga	ttcaaggact	tgggtgaaga	aaacttcaag	gcttttggctt	tgatcgcttt	180
cgctcaatac	ttgcaacaat	gtccattcga	agatcacgtc	aagttgggtca	acgaagttac	240
cgaattcgct	aagacttggtg	ttgctgacga	atctgctgaa	aactgtgaca	agtccttgca	300
caccttggtt	ggtgataagt	tgtgtactgt	tgctaccttg	agagaaacct	acggtgaaat	360
ggctgactgt	tgtgctaagc	aagaaccaga	aagaaacgaa	tgtttcttgc	aacacaagga	420
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ccacgacaac	gaagaaacct	tcttgaagaa	gtacttgtac	gaaattgcta	gaagacaccc	540
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gatcaagcaa	aactgtgaat	tgttcgaaca	attgggtgaa	tacaagttcc	aaaacgcttt	1320
gttggttaga	tacactaaga	aggccccaca	agtctccacc	ccaactttgg	ttgaagtctc	1380
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